James Braxton (lt.) of Wade, Inc. and Preston Arrington (rt.) meet with Trey Cooke (ct.) to inspect the tractor donated to Delta Wildlife for use on this project.

Planting warm-season grasses near a wetland south of Moorhead. All project sites are located adjacent to wetlands, streams, lakes, or rivers where croplands drain directly into the water body.

Mississippi Department of Environmental Quality have developed monitoring plans to document the water quality and wildlife benefits of the project sites. All known pollutants found in waters near agriculture are quantitatively proportional to sediment loads. Therefore, it is only necessary to measure sediment, as a reduction in sediment will equal a proportional reduction in all other agricultural non-point source pollutants. The Rusle Equation will be used to calculate sediment loading and reductions on all project sites. Analytical monitoring will be used to verify these calculations. Wildlife benefits will be measured by monitoring the responses of avian populations to the project areas. Selected project areas will be monitored for winter bird utilization, breeding season bird utilization, reproduction, and habitat resources (vegetative survey). All species of birds will be monitored; however, additional monitoring components have been added to more fully document quail population responses within project areas.

This Truax Drill was purchased by Delta Wildlife to plant fluffly seeded grasses. This is the only planter of its type in the Delta.

Bluestems after 4 months of growth. mature plants will have a basal diameter of 3 feet and reach 4 to 5 feet in height.

Partidge Pea - Left
Kobe Lesdedeza - Right

Primary Project Treatments

During the development of the project, the Implementation Committee established several project site prescriptions. One or more of these prescriptions would be used on each project site to generate maximum wildlife and water quality benefits. Some prescriptions included planting riparian forest buffers, field borders, and the installation of sediment retention structures in areas with point source agricultural run-off. However, the majority of the prescriptions included the planting of a contour buffer strips with specific plantings identified by the committee as having tremendous wildlife habitat potential and water filtering capabilities.

Six species of plants were identified for contour buffer plantings: Little Bluestem, Big Bluestem, Indiangrass, Switchgrass, Partridge Pea, and Kobe lespedeza. The Bluestems and Indian-grass would be used in a mixture to establish a native, perennial warm-season grass buffer. These plantings would establish slowly over a 3-year period, forming an excellent grass filter while providing significant habitat resources for quail, grassland songbirds, small mammals, and other species. Partridge Pea and Kobe lespedeza would also be used in a mixture to establish a legume buffer up-slope from the warm-season grass buffers.

The legume mixture would provide nitrogen to adjacent warm-season grass buffers and enhance the habitat value of the entire buffer. Switchgrass is primarily a water quality and erosion treatment tool and would only be used in areas with concentrated run-off.

Some riparian areas were re-forested with hardwood seedlings. It will produce seed this fall. Notice the Legumes planted in the background.

The longest leaf of this Bluestem is its reproductive organ. It will produce seed this fall. Notice the legumes planted in the background.

The ground under the Partridge Pea is bare. This allows quail and other ground birds to move freely underneath the plant. The dense overhead canopy protects them from predators and keeps them cool in the summer months.

This thin band of Bluestem will fill in over the next three years to completely cover the ground.

Bluestems and Indiangrass have fluffy seed and require a special fluffy seed drill for planting.

(Right) Bluestem grasses provide excellent nesting areas for Quail and other grassland birds.